YEFREMOVA, L.A., zasluzhennyy master sporta; ZAK, M.S.; RAKITINA, R.I.,
        starshiy metodist; ZABAROVSKIY, K.K.; GOL'BERG, A.Ya.; KAZAKOV,
        M.B.; ZHAVORONKOV, I.Ye. (Kerch'); KLYUCHAREVA, I.P. (Moskva);
        BELAYA, N.A., kand.med.nauk; POPOV,E.F., artist

        We continue the discussion of the power of physical culture.
        Zdorov'e 8 no.8:26-28 Ag '62.   (MIRA 15:8)

        1. Zamestitel' glavnogo vracha 2-go Moskovskogo vrachebno-fizkul'-
        turnogo dispansera (for Yefremova). 2. Glavnyy vrach Oblastnogo
        vrachebno-fizkul'turnogo dispansera, Rostov-na-Donu (for Zak).
        3. Respublikanskiy vrachebno-fizkul'turnyy dispanser, Kiyev (for
        Rakitina). 4. Glavnyy vrach Respublikanskogo vrachebno-fizkul'turnogo
        dispansera, Minsk (for Zabarovskiy). 5. Zaveduyushchiy kabinetom
        lechebnoy fizkul'tury Respublikanskogo vrachebno-fizkul'turnogo
        dispansera, Minsk (for Gol'berg). Glavnyy vrach Gorodskogo vrachebno-
        fizkul'turnogo dispansera, Sverdlovsk (for Kazakov). 6. Gosudarstven-
        nyy Akademicheskiy Malyy teat (for Popov).
                        (PHYSICAL EDUCATION AND TRAINING)

GOL'BERG, D., kand.tekhn.nauk; REMDINO, S., inzhener-arkhitektor;
SERZHANTOV, S., inzhener-arkhitektor

Panel and frame-panel reed pressboard buildings. Zhil.stroi.
no.8:17-18 Ag '61.   (MIRA 14:8)
          (Reed products)   (Walls)

GOL'BERG, D., kand.tekhn.nauk; RENDINO, S., arkhitektor; ERZENETOV, S.,
     arkhitektor

The village of Sverdlovo in several years. Sil'. bud. 11
no.5:16 My '61.   (MIRA 14:6)
               (Sverdlovo--City planning)

GOL'BERG, D., kand.tekhn.nauk (Odessa)

Use of reed in rural construction. Bud. mat. i konstr. 4
no.3:50-54 My-Je '62.   (MIRA 15:5)
          (Reed products) (Ukraine--Farm buildings)

GOL'BERG, D., kand.tekhn.nauk; RENDINO, S., arkhitektory; SERZHANTOV, S.,
arkhitektory

Using precast methods in reed construction. Sel', stroi. no.7:
8-8b '62.   (MIRA 15:3)
(Reed products) (Farmhouses)

GOL'BERG, D., kand.tekhn.nauk; SHTERNBERG, K., inzh.

Silicalcite tile and other products for rural construction.
Bud.mat.i konstr. 4 no.4:46-49 Jl-Ag '62.   (MIRA 15:8)
    (Sand-lime products)   (Farm buildings)

GOL'BERG, D., kand.tekhn.nauk; AGURA, D. [Ahura, D.], inzh.

Field camp for machinery operators. Sil'.bud. 12 no.4:11-13
no.4:11-13 Ap '62. (MIRA 15:8)

(Farm buildings)

GOLD'BERG, D.I., prof.; LEVINA, G.P.; DAITER, I.M.; KARPOVA, S.V.;
       GOL'DBERG, Ye.I.; TITERINA, V.I.; LATYPOV, V.S.; SIMKIN, N.A.;
       GOL'DBERG, A.I.; CHERNOVA, V.A.

       Clinical significance of erythrocytometry. Probl. gemat. i perel.
       krovi 9 no.10:8-14   O '64.   (MIRA 18:3)

       1. Tomskiy meditsinskiy institut.

GUR'YEV, A.N., kand.med.nauk; LISOVSKAYA, N.D., kand.med.nauk; SKRIPKIN, Yu.K.;
SOMOV, B.A.; GOL'DBERG, D.M.; LEBEDEV, B.M.

New drugs. Vest. derm. i ven. 38 no.9:78-79 S '64.

(MIRA 18:4)

S/065/60/000/011/003/009
E030/E412

AUTHORS: Kreyn, S.E., Kalayman, Ye.N. Abramovich, S.Sh.,
             Gol'berg, D.O., Stupishin, Yu.V. and Smirnova, N.I.

TITLE   Preparation of Low Pour Point Distillate Oils of Type
             MK-8 (MK-8) From Tuymazy Devonian Crudes

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1960, No.11,
            pp.11-14

TEXT   A method has been developed for obtaining high quality low
pour point distillate lubricating oils of type MK-8 from Tuymazy
Devonian crude and from Balakhany, Dossor and Anastas'yevka crudes
Previous methods for obtaining MS-8 (MS-8) and transformer oils
from sulphurous Tuymazy Devonian crudes had used refining with
phenol, followed by MEK/toluene or acetone/toluene extraction of
paraffins, and by contacting with clay, they all failed on
oxidation stability   The present method takes a very narrow cut
(IBP and 7,12,28,32,47,54 and 64% boiling at 47 85,120,205,225,300
330 and 350°C respectively), refines with phenol, and extracts the
paraffins by chilling to -65°C with a mixture of ammonia and
ethanol and uses no further contacting   Typical data for the
oil are: density 0 835 gm/cc, flash point (closed) 158°C
Card 1/2

S/065/60/000/011/003/009
E030/E412

Preparation of Low Pour Point Distillate Oils of Type MK-8 (MK-8)
From Tuymazy Devonian Crudes

viscosity 6.5 centistokes at 50°C, sulphur content 0.37%   It
satisfies specification ГОСТ 6547-33 (GOST 6547-33) with a pour
point of -55°C.   Even higher qualities may be obtained by further
fractionation, putting the 305 to 355°C cut through a column with a
250 to 253°C base temperature and taking the 50 to 65% cut with a
viscosity of 5.9 to 6.3 centistokes at 50°C   This oil is superior
both to MK-8 and transformer oil, with lower viscosity, smaller
viscosity-temperature slope from 20 to +50°C and greater oxidation
stability on addition of 0.2% Ionol anti-oxidant (meeting
specification ГОСТ 981-85 (GOST 981-85)   If 0.7% Ionol is added
exceptional high temperature oxidation stability is obtained.
giving only 0.1 gm KOH per gm of oil for oxidation at 170°C.
There are 2 tables.

Card 2/2

GOL'BERG, L. R. Doc (and Tech Sci -- (diss) "Planning, building, and public servicing of field stands of the tractor brigades in the steppes of the Ukraine." Mos, 1957. 16 pp (Moscow Inst of Agricultural Engineers), 110 copies

(KL, 21-57, 101)

GOL'BERG, D.R., kand.tekhn.nauk; SHTERNBERG, K.L., inzh.

Silicalcite products plant for farm construction. Strol. mat. 8
no.4:5 Ap '62.   (MIRA 15:8)
(Sand-lime products)
(Odessa Province--Building materials industry)

GOLDBERG, D. Sh.

Plastic compositions for dental work. I. B. Brodskii,
A. E. Rofe, and D. Sh. Goldberg. U.S.S.R. 66,930, Jan.
25, 1950. Compn. particularly suitable for making artificial

artificial teeth consist of copolymers of styrene, Me meth-
acrylate, and di-Bu phthalate, plus poly (methyl methacry-
late) and di-Bu phthalate. A recommended compn. is made
from 85 parts copolymer and 15 parts poly (methyl meth-
acrylate) by wt. The copolymer is made up of styrene 20,
Me methacrylate 75, and Bu phthalate 5%, while the poly-
(methyl methacrylate) is made up of Me methacrylate 95
and di-Bu phthalate 5%. To this compn. is added 10 parts
di-Bu phthalate.   M. Hiss

GOL'BERG, F.R. (Leningrad)

Clinical aspects of Tay-Sachs amaurotic idiocy. Zhur. nevr. i psikh.
65 no.7:1101 '65.   (MIRA 18:7)

SOKOLOV, Anatoliy Sergeyevich; GOL'BERG, G.I., red.; MAL'KOVA, N.V.,
tekhn. red.

[Lamps and lighting devices for motor vehicles] Avtomobil'nye
lampy i osvetitel'nye pribory. Izd.3., perer. Moskva, Nauchno-
tekhn. izd-vo M-va avtomobil'nogo transp. i shosseinykh dorog
RSFSR, 1961. 80 p.   (MIRA 15:3)
                        (Motor vehicles--Lighting)

KISELEV, B.P.; SOLODUKHIN, I.A., MIRCHOV, A.A., ROL'ZBERG, G.S.

Industrial production of enclosing elements made of expanded clay foam concrete. Strat. mat. 7 no.2:5.7 F '65.
(MIRA 18:3)

1. Glavnyy konstruktor sektora izdelen korpusov Byuro vnedreniya Nauchno-issledovatel'skogo instituta betona i zhelezobetona (for Kiselev). 2. Glavnyy inzh. Byuro vnedreniya Nauchno-issledovatel'skogo instituta betona i zhelezobetona (for Solodukhin). 3. Glavnyy inzh. Eksperimental'nogo zavoda treska Mosstroymaterialy (for Rol'zberg).

AUTHORS: Novikov, V., Senior Instructor; Bolʹ..., L., Instructor

TITLE: The Tales Told by QSL Cards (O chem rasskazyvayut kartochki-
                kvitantsii)

PERIODICAL: Radio, 1956, Nr 11, pp 21-22 (USSR)

ABSTRACT: The authors say that the ever-increasing stream of QSL cards
                (cards sent by radio stations to each other to certify that
                radio contact had been established between them) pouring into
                the exchange office of the Tsentralʹnyy radioklub DOSAAF
                (Central Radio Club of the DOSAAF) is a clear indication of
                the widening interest in amateur radio in the USSR, and the
                warm friendship between Soviet radio amateurs and their col-
                leagues in the Peoples' Democracies. However, they complain
                that many Soviet radio amateurs are not sending cards to those
                with whom they have established contact.
                There are 6 drawings and 1 photo.

ASSOCIATION: Tsentralʹnyy radioklub DOSAAF SSSR (The Central Radio
                Club of the USSR)

Card 1/1

GOL'BERG, Iosif Grigor'yevich; ABE, ..., red.

[Universal laboratory electroplating system] Universal'-
naia laboratornaia ustanovka dlia gal'vanopokrytii. Le-
ningrad, 1964. 13 p.
(MIRA 18:6)

BRUK, E.S.; GOL'BERG, I.G.; SMIRNOV, A.I.

Unit for electroplating. Mashinostroitel' no.6:26 Ja '61.
(MIRA 14:6)
(Electroplating—Equipment and supplies)

S/118/62/000/005/001/001
D234/D308

AUTHORS: _Gol'berg, I.G., Sverdlov, V.I., Engineers, and
                Shub, I.Ye., Candidate of Technical Sciences

TITLE: An automated department for casting under pressure

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva,
                no. 5, 1962, 4 - 6

TEXT: Description of the department for casting zinc
alloys and brass, designed by Gipropribor and NIITMASh Leningrads-
kogo sovnarkhoza jointly with Leningradskiy karbyuratornyy zavod
(Leningrad Carburetor Plant) and now under construction at the lat-
ter. Magnetohydrodynamic pumps for proportioning and transporting
metal were designed at the Institute of Physics of the Latvian Aca-
demy of Sciences and by TsKTB. In the section of zinc alloys liquid
metal is fed directly to the batchers through a pipeline and the
pump secures constant pressure. Automatic control system is based on
the principle of controlling coltage supplied to the windings of pump,

Card 1/2

An automated department ...

S/118/62/000/005/001/001
D234/D308

and is contactless and without relays. In the brass casting section
liquid metal is transported by accumulator trolleys. Automatic trans-
port inside the department, automatic control of temperature in all
parts of the pipeline etc., are also provided. There are 3 figures.

Card 2/2

GOL'BERG, I.G.; SMIRNOV, A.I.

Pickling unit. Mashinostroitel' no.7:29 Jl '62.   (MIRA 15:7)
(Metals--Pickling)

GOL'EERG, I.G., inzh.; SVERDLOV, V.I. inzh.; SHUB, I.Ye., kand.tekhn.nauk

    Automatic die-casting shop. Mekh.i avtom.   ...16 no.5:4-6 '62.
                                           (MIRA 16:5)

      (Die casting)   (Automation)

GOLDBERG, I.

"Kinetics and Optimum Phenomenom of Vulcanization," Dok. AN, 53, No. 4, 1946.
Research Inst. of Tire Ind., Moscow.-1946-.

GOL'BERG, I.

THE KINETICS AND OPTIMUM STATE OF ~~WHAT~~ VULCANIZATION. I. Vulcanization of
natural rubber. B. Dogadkin, B. Karmin, and I. Gol'berg. J. Gen. Chem.(USSR) 17,
1070-9 (1947) (In Russian); cf. C.A. 41,3315f. — In vulcanization, 2 processes
occur simultaneously "constructive" combination of S and "destructive" combination
of O with opposing effects on the tensile strength 7);

(Note: ba#lance of card not copied) SEE: Dogadkin, B. A.

68.   Vulcanisation of rubber. III. Kinetics of the change of tensile strength during vulcanisation of natural rubber. B. A. DOGADKIN, B. KARMIN, and I. GOL'DBRG. Koll. Zhur., 1947, 9, 255-60; Translation: Rubb. Chem. Technol., 1954, 27, 615-21. It is shown that the tensile strength of vulcanised butadiene-styrene rubber is a linear function of the plasticity of the original material. Proceeding from the concept of the presence during vulcanisation of a number of opposing processes of structure formation and destruction, both of which influence the molecular weight of the rubber, a general equation is derived which expresses the kinetics of the change of tensile strength of a vulcanisate. Experimental material is offered which proves the applicability of the proposed equation to the representation of the kinetics of vulcanisation of natural rubber mixes with relatively small sulphur contents (up to 3%).

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b

/ Vulcanization of rubber. III. Kinetics of change of tensile strength of natural rubber during vulcanization. B. A. Dogadkin, B. Karmin, and I. Gol berg (Sci. Research Inst. Tire Ind., Moscow). *Rubber Ind. U. Technol.* 27, 615-21 P5H.- Ser C. I. 47, 19 -   C. C. Davis

GOL'BERG, I.I.

Method for the statistical processing of the results of physical
and mechanical tests. Kauch. i rez. 16 no.6:23-27 Je '57.
(MIRA 10:10)

1.Nauchno-issledovatel'skiy institut rezinovykh izdeliy shirokogo
potrebleniya.
(Rubber--Testing) (Mathematical statistics)

SOV/138-58-7-14/19

AUTHORS: Fedyukin, D.L. and Gol'berg, I.I.

TITLE: A Contact Thickness Gauging Instrument for Easily
             Deformable Materials (Kontaktnyy tolshchomer dlya
             legkodeformiruyemykh materialov)

PERIODICAL: Kauchuk i rezina, 1958, Nr 7, pp 38 - 39 (USSR)

ABSTRACT: An illustration and description is given of a new
             instrument, specially designed for the purpose of
             measuring the thickness of spongy or easily deformable
             materials.
             It appears to have been adapted from a microscope with
             rack and pinion coarse adjustment and a micrometer screw
             fine adjustment for the barrel. The position of the
             barrel in relation to the table is determined by a vernier
             seen on the left-hand side of the illustration. A silver
             disc, 20 mm diameter, weighing 0.5 g, is suspended from
             the barrel and above this disc is an electrical contact.
             In operation, the barrel is lowered until the disc
             touches and compresses the specimen on the table, forcing
             the disc against the contact. The barrel is then raised
             by the micrometer screw until the contact is broken,
             which is indicated by a lamp, seen at the top of the
             illustration. The silver plate has a small insulated

Card 1/2

SOV/138-??-?-14/19

A Contact Thickness Gauging Instrument for Easily Deformable
Materials

position at this moment.
The instrument is accurate to 0.1 mm. The table gives
a comparison of the thicknesses assessed on four different
samples (1 to 4), by four different operators (1 to 4 in
the horizontal block) using methods A and B. Method A
is the usual one in which the thickness of the specimen
while under a definite load is measured not by use of the gauging instrument
described. The possibility of agreement between the
four operators when using method B is evident.
Arithmetic means and maximum deviations from these means
for the two methods A and B are given in the four right-
hand columns of the table.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i
               lateksnykh izdeliy (Research Institute for Rubber and
               Latex Products)

Card 2/2   1 Gages--design   2 Gages--Operation

GOL'BERG, I.I.

Using mathematical statistics in industry ("Using statistic methods to increase quality of production" by I. Gofman, P. Rabinovich. Reviewed by I.I. Gol'berg). Kauch. i rez. 17 no.11:40 N '58.   (MIRA 11:12)
          (Mathematical statistics)
          (Gofman, I.) (Rabinovich, P.)

AUTHORS: Fedyukin, D.L., Grusyuk, Yu.Z. and Gol'berg, I.I.

TITLE: Determination of the Kinetics of Diffusion in Balls
            (Opredeleniye kinetiki diffuzii v myachakh)

PERIODICAL:Kauchuk i Rezina, 1959, Nr 4, pp45-47 (USSR)

ABSTRACT: The playing properties of tennis balls are determined
            largely by visco-elastic properties, which in turn are
            dependent on internal pressure and the properties of the
            rubber. The standard requires that the internal pressure
            at the time of manufacture should be from 300 to 500 mm Hg.
            In view of the wide variation allowable, the pressure as
            determined after storage may show similar wide variation.
            Thus a kinetic test to measure actual rate of diffusion
            is helpful. Figure 1 shows a manometer formed of
            capillary tube, 1.2 mm bore, to give low dead capacity.
            The ball is punctured by a hollow needle, and a paste of
            lead oxide and glycerine is used to ensure leak tightness.
Card 1/2   The ball is punctured at the seam between gores. The

SOV/138-59-4-13/26

Determination of the Kinetics of Diffusion in Balls

difference in pressure is logged over several days, and kinetic diffusion curves, as in Figure 2, where p/p_c is the ratio of the actual pressure to the initial pressure is plotted against time in days. A formula and constants were found to fit these curves. From these, using statistical distributions, the probable time in storage before given percentages of the balls will lose pressure to a level below 500 mm Hg is tabulated in Table 2, where time is given in days. Balls sprayed or coated with a polyamide film are compared with uncoated balls. It is seen that the actual period at which pressure is maintained within the set limits is much shorter than the required six months. It is suggested that balls must therefore be stored under pressure in sealed containers. Coating with a polyamide film does increase storage life considerably.

There are 2 figures and 2 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy (Scientific-research Institute for Rubber and Latex Articles)

Card 2/2

report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 1960.

S/069/60/022/02/019/024
D054/D002

5(

AUTHOR: Gol'berg, I.I.

TITLE: On Ultimate Stress in Constant Rate Deformation

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol XXII, Nr 2, pp 249-251
             (USSR)

ABSTRACT: The author gives an interpretation of the case, in
             which a more complicated Maxwellian liquid during de-
             formation at constant rate exhibits the phenomenon
             of maximum stress without disintegration of the
             structure. The author exemplifies this assumption on
             a four-element model consisting of two Maxwell models
             combined parallel one to another (see diagram), the
             period of relaxation in the first branch of the mo-
             del being longer than the relaxation period in the
             second branch, $\tau_1 > \tau_2$. On repeated elongation it is
             possible to accumulate a certain amount of stress in

Card 1/3

S/069/60/0.../02/019/024
D054/D002

On Ultimate Stress in Constant Rate Deformation

the first branch, designated by the author with $2\sigma_o$. On releasing the model, the extended spring E_1 will contract at once, calling forth thereby compression of spring E_2. Contracting of spring E_1 will stop, when spring E_2 will be compressed to stress – σ_o. During the described process the pistons remain immovable, because deformation occurs at once. The general stress in the model is equal to zero, but the model is "charged" with the internal stress σ_o.

This moment is to be taken as the starting point for the calculation of the time during the subsequent deformation at constant rate. An analogous process, for instance, occurs during the mastication of crude

Card 2/3

S/069/60/022/02/019/024
D034/D002

On Ultimate Stress in Constant Rate Deformation

rubber mixtures. Preliminary stresses of such type
may also arise, when filling a narrow slot clearance
in a rotation viscometer. On the basis of his ex-
periments the author derives two formulae determining
the time required to reach the maximum stress τ. The
curves (stress as a function of time and v_o) given in

the graph satisfactorily coincide with the experimental
curves given by A.A. Trapeznikov and G.V. Assonova
$\sqrt{}$ Ref. 3$\sqrt{}$. The propounded theory holds only within
the limits of justifiability of the principle of super-
position (linear theory). As far as known to the author,
the "charged" mechanical model was used by him for
the first time. There are 1 diagram, 1 graph and 5
Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i la-
teksnykh izdeliy, Moskva (Scientific Research Insti-
tute of Rubber and Latex Products, Moscow)

SUBMITTED: March 16, 1959

Card 3/3

ZAKHARENKO, N.V.; FEDYUKIN, D.L.; GOL'BERG, I.I.

Determining the durability characteristics of latex film.
Trudy Nauch.-issl. inst. shin. prom. no.7:140-147 '60.
(MIRA 14:8)

(Latex)

GOL'BERG, I.I.; ZIL'VESTR, E.Ya.; ZUBKOVA, Yu.D.; MAYZELIS, B.A.;
CHERNAYA, V.V.

Effect of the inflation extent of a gel on the tensile strength
of vulqanized meteorological radiosonde balloon envelopes. Kauch.
i rez. 20 no.12:35-37 D '61.   (MIRA 15:1)

1. Nauqhno-issledovatel'skiy institut rezinovykh i lateksnykh
izdeliy.
          (Colloids)   (Rubber goods--Testing)

S/081/61/000/023/061/001
B106/B101

AUTHORS: Zakharenko, N. V., Fedyukin, D. L., Gol'berg, I. I.

TITLE: Determination of the stability characteristics of latex films

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 502 - ...,
              abstract 23P365. (Tr. N.-i. in-ta shin. prom-sti, no. 7,
              1960, 140 - 147)

TEXT: The results obtained in tests of natural and polychloroprene latex
(nairit Л-7 (L-7)) films prepared by ionic precipitation and by drying,
were evaluated statistically. Deviations of the minimum and maximum
stability values from the mean were up to 75% for films prepared by ionic
precipitation, and 3 - 10% for films prepared by drying. The root mean
square deviation of the stability index δ is 13 - 33%. ≤ 80% of the samples
show deviations within the limits layed down by ГОСТ (GOST). Deviations
of minimum and maximum specific elongation from the mean were only 1/2 to
1/3 that of the corresponding deviations in stability. Deviations of
minimum and maximum thickness from the mean were up to 65%. For films of
thickness < 0.2 mm, the use of cutter blades with different radii of

Card 1/2

S/081/61/000/023/061/061
B106/B101

Determination of the stability...

curvature of the working part gave a stability versus sample thickness curve which exhibited a peak around 0.2 mm thickness. The deviations from the theory (see RZhKhim, no. 23, 1955, 54852) are possibly due to traces of the fixing agent (kaolin) remaining on the films obtained by ionic precipitation, and causing microdefects there. To lower the spread of the indices, the thickness variations may not exceed $\pm$ 1%. The profile of the blade has an influence on the stability properties and the spread of the indices. Blades with 40 and 50 mm radii of curvature are the most acceptable. The type of blade effects the spread of the data, too. For reliable results, it is essential that parallel tests of 25 samples be carried out and the mean value of the stability determined with an accuracy of 0.3%. The mean actual stability f_0 is obtained from $f_0 = f' \pm 1.1 \cdot 6'/n$,

where f' is the mean stability, 6' the standard, and n the number of tests. [Abstracter's note: Complete translation.]

Card 2/2

31623
S/138/61/000/012/006/012
A051/A126

15 9500

AUTHORS: Gol'berg, I.I., Zil'vestr, L.Ya.; Zubkova, Yu.D; Mayzelis,
             B.A., Chernaya, V.V.

TITLE: The effect of the degree of expansion of gel on the tear elonga-
             tion of vulcanized meteorological radio-probing balloons

PERIODICAL: Kauchuk i rezina, no. 12, 1961, 35 - 37

TEXT: A study was made of the effect of the preliminary degree of expan-
sion of gels on the tear elongation of the vulcanized balloons nos. 100 and
150; the optimum degree of the gel expansion was established. A square para-
bolic relation is derived between the tear elongation of the vulcanized bal-
loons and the elongation of the crude gel. Soviet meteorological balloon-
probes are produced from polychloroprene latex, Л-17 (L-17), by the ionic de-
positing method. The present article describes the results of the investiga-
tions of balloons with an initial diameter of D_0 = 100 cm (No. 100) and D_0 =
150 cm (No. 150). The balloons were produced from a mixture of L-17 and 15%
dibutylsebacynate ДБС (DBS), as antifreeze. The degree of expansion of the
gel (λ_g) was determined as the ratio of the diameter of the expanded balloon

Card 1/4

The effect of the degree of expansion of ..

from gel, D_r, to its diameter in a expanded state D_o (prior to expansion of the gel walls). The air volume necessary to expand the gel was determined with a gas meter -100 (RS-100). D_r was estimated from the formula of the sphere volume. D_o was estimated from the air volume used to inflate the balloon. The tear elongation λ_{tear} of the vulcanized balloons was determined from the ratio of the air volume within the balloons at the moment of tear V_{tear} to the tear volume V_o needed to expand the balloon :

$$\lambda_{tear} = \sqrt[3]{\frac{V_{tear}}{V_o}}$$ (1)

V_{tear} and V_o were counted by the diaphragm, mounted on the suction side of the air blower. A mathematical relation is established between the tear elongation of the vulcanized balloons and the degree of the preliminary expansion of the gels. It is assumed that the relation $\lambda_{tear} = f(\lambda_g)$ can be expressed by the equation of the square parabola:

$$\lambda_{tear} = a \lambda_g^2 + b \lambda_g + c$$ (2)

The average tear of small of the balloons were calculated using (2) at various degrees of gel elongation. The assumption of the parabolic-shape relation be-

Card 2/

31622
S/138 61/000/012/006/003
A051-A126

The effect of the degree of expansion of . . .

tween λ_{tear} and λ_g is tested by calculating the coefficient of the parabolic regression η according to the formula:

$$\eta = \sqrt{\frac{S^2 \lambda_{calc}}{S^2_\lambda}} \qquad (3)$$

where $S^2 \lambda_{calc}$ is the dispersion of the calculated average values of the tear elongation of the balloons around the general average of experimental values, S^2_λ the dispersion of the experimental values of the tear elongations around their general average. When $\eta = 1$, there is a functional square parabolic relationship between λ_{tear} and λ_g. If $\eta = 0$, then the assumption is erroneous If η lies between 0 and 1, then the evaluation is made according to the formula. $A = \eta \sqrt{N - 1}$ (4), where N is the number of tests. If $A \geqslant 3$, then η differs significantly from 0, i e , there is a relation between λ_{tear} and λ_g close to a parabola. If $A < 3$, then η differs slightly from zero and there is no parabolic relation between them. At a given degree of expansion of the gel, a redistribution of the tension takes place, connected with the smoothing out of the gel along the thickness. Thus, the gel becomes more uniform in its properties, resulting in higher values of tear elongation of the vulcanized balloons. At low degrees of gel expansion, expansion of the less dense or thin

Card 3/4

The effect of the degree of expansion of ...

ner parts of the gel takes place the non-uniformity. At further progress of
deformation, the uniformity of the gel will be upset due to partial destruction
of the bonds between the various globules and this, in turn, will lead to a
drop in the tear elongations of the vulcanizates. There is 1 figure and 4 So-
viet-bloc references.

ASSOCIATION   Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izdeliy
               (Scientific Research Institute of Rubber and Latex Articles)

Card 4/4

S/069/62/024/002/002/002
B110/B101

AUTHORS: Dogadkin, B. A. Tarasova, Z. N., Gol'berg, I. I., Raanysan V., K. G.

TITLE: Effect of vulcanization structures on the strength of vulcanizates

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 2, 1962, 141-151

TEXT: The static and dynamic strengths of three-dimensional elastomers (vulcanizates without a filler) depend on (1) composition and structure of the molecular chains, (2) type, concentration and distribution of the vulcanized bonds, (3) secondary structures. The vulcanized bonds may be (a) covalent, (b) electrovalent, and (c) local and intramolecular. Since their energies and distributions are not uniform it was suggested that

$$P = \tau_0(\beta)\, x^{\prime\prime} \left(\frac{1}{1+0.39x} - q \right) \left(1 - \frac{M_c}{M} \right)^{\prime} . \qquad (1)$$

where

$$x = \left(\frac{aT_c}{kT_3} \right)^{\prime\prime} . \qquad (2)$$

Card 1/3

Effect of vulcanization structures ...

$$ r_0(\beta) \quad \left(\frac{\Delta c}{3 M_0}\right)^{1/3} \left(\frac{kT}{a T_c}\right)^{1/3} T_c \frac{1}{1 + b_1 \beta} ; \qquad (3) $$

$$ q \quad \frac{1}{2} \frac{1}{b_1^2}, \beta \quad \frac{n_1}{n_1 + n_2}, 0 \quad \beta < 1, $$

where ρ is the polymer density, M_c is the average molecular weight between
the sites, M_0 is the molecular weight of the monomer, σ is the average of
monomeric links per chain, a is the average interstitial chain segment
length, T_c is the strength of the polymer chain, and n_1 and n_2 are the
numbers of cross links of different types. Weak bonds and bonds that are
easy to regroup (polysulfide, salt, and hydrogen bonds) promote the
dissipation of local overstress, the alignment of the principal chain, and
the formation of crystalline domains. The strong C-C bonds back up the
strength of the space lattice at high temperatures and significant strain.
The measurement of tensile strength was experimental proof of the proposed
formula. Natural rubber was vulcanized (1) with sulfur and diphenylguanidine
(polysulfide bonds ~27 kcal/mole), (2) treated with Co gamma rays at
room temperature (lattice with C-C bonds ~64 kcal/mole), (3) with sulfur
Card 2/3

Effect of vulcanization structures ...

3/063/62/024/002/001/008
B110/B101

and gamma rays. The optimum tensile strengths were (1) ~770 kg/cm² at $V_c = 5.8 \cdot 10^{19}$ ml⁻¹, (2) ~250 kg/cm², $V_c = 3.1 \cdot 10^{19}$ ml⁻¹, (3) ~500 kg/cm² at $V_c = 5.1 \cdot 10^{19}$ ml⁻¹. Movable and regroupable salt bonds lead to a great static strength of butadiene styrene rubbers vulcanized with metal oxides. The dynamic strength depends on the types of bond and on the strain conditions. Symmetrical alternating-sign twist with bending at 100°C showed that vulcanizates with thiuram with C-C and C-S-C bonds have a greater strength than vulcanizates with diphenyl guanidine and sulfur with C-S$_x$-C polysulfide bonds. Examination of non-filled vulcanizates of butadiene styrene rubber with sulfur, hexachloro ethane, dicumyl peroxide, and tetrachloroquinone at ~100°C, 250 cps, and 30% deformation amplitude showed that the vulcanizate of carboxyl rubber with salt bonds had the highest creep rate. The creep rate was dependent on the number of deformation cycles before rupture started to occur. There are 11 figures and 2 tables.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im.
                 M. V. Lomonosova (Moscow Institute of Fine Chemical
                 Technology imeni M. V. Lomonosov)
SUBMITTED: November 14, 1961
Card 3/3

GOL'BERG, I. I.; MAYZELS, B.A.; CHERNYE, N.V.

Estimation of the height of ascent of radiosonde shells on the basis
of surface tests. Meteor. i gidrol. no.6:43-47 Je '62. (MIRA 15:7)
(Radiosondes)

S/138/62/000/007/002/002
A051/A126

AUTHORS: Gol'berg, I.I.; Mayzelis, B.A.; Chernaya, V.V.; Shepelev, M.I.

TITLE: The nature of the scale factor in testing the mechanical properties
             of radio-sounding casings

PERIODICAL: Kauchuk i rezina, no. 7, 1962, 38

TEXT: A study was made to determine the effect of casing dimensions on
the mechanical properties, characterized by the scale factor X. K expresses the
ratio of the average tear elongation of the capsule $\overline{\lambda_1}$ to the average tear
elongation of the sample, $\overline{\lambda_2}$, of the initial area 0.0113 m^2:

$$K = \frac{\overline{\lambda_1}}{\overline{\lambda_2}} .$$ The tear elongation was determined from: $\lambda_1 = \sqrt[3]{\dfrac{V_{tear}}{V_o}}$, where

V_{tear} is the volume of the casing at the moment of tear, V_o - the initial volume
of the casing. The tear elongation of the samples was determined on an instru-
ment of double latex-film deformation. Data obtained showed the average tear

Card 1/2

S/138/62/C00/010/005/CC8
A051/A126

AUTHORS: Gel'berg, I.I., Mayzelis, B.A., Savtsov, N.Z., Chernaya, V.V.,
             Shepelev, M.T.

TITLE: Automatic instrument for two-dimensional deformation of rubber film

PERIODICAL: Kauchuk i rezina, no. 10, 1962, 43 - 46

TEXT: An automatic instrument for testing rubber film under expansion in
two mutually-perpendicular directions has been developed, based on the method of
elongation measurement. The new instrument, which can determine the relation,
tension-elongation and tear characteristics of the rubber film in two-dimensic-
nal deformation, is said to be devoid of the disadvantages of previous similar
instruments. The main advantage of subject instrument is the automatic record-
ing of results, thermostating case of the sample, simplicity and economy of con-
struction. The relation between a, the length of the horizontal semi-axis and
the elongation at the peak of the ellipsoid λ, and the height of the ellipsoid
H is experimentally determined: $a = 1.75 \lambda - 2.75$ (1), $H = 1.59$ a (2). The
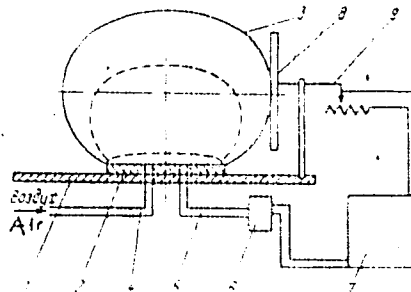tension is calculated from formula:

Card 1/4

Automatic instrument for two-dimensional S/138/62/000/010/005/008
                                                   A051/A126

sents a pressure-meter (Fig. 5), with a resistance of 214 ohm, sensitivity 6 - 8 mm water column. The EMP-209 (EMP-209) instrument is used for recording results having an index variation half that of the Shopper-type dynamometer. There are 6 figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut rezinovykh i lateksnykh izde-
              liy (Scientific Research Institute of Rubber and Latex Articles)

Figure 2: Diagram of the automatic instrument
for two-dimensional deformation of rubber
films: 1 - horizontal panel; 2 - clamp; 3 -
sample; 4 - air supply pipe; 5 - pipe; 6 -
pressure pickup; 7 - registering instrument;
8 - disk; 9 - rod

Card 3/4

L 18459-66   EWT(d)/EWP(1)   IJP(c)   BB/GG
ACC NR: AP6006383   SOURCE CODE: UR/0413/66/000/002/0115/0116

INVENTOR: Gol'berg, I. Ye.; Zemtsov, G. P.; Telyatnikov, L. I.

ORG: none

TITLE: An rf pulse-amplitude flip-flop based on tunnel diodes.   Class 42, No.
178169

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 115-
116

TOPIC TAGS: flip flop circuit, tunnel diode, rf pulse, logic element

ABSTRACT: This Author's Certificate introduces: 1. An rf pulse-amplitude flip-flop
based on tunnel diodes. To provide decoupling between the input and output and to
simplify the design of logic circuits, the device contains two inductances which
make up two tank circuits, two series-connected tunnel diodes in the supply circuit
and a blocking capacitor for high frequency decoupling of the tank circuits. 2. A
modification of this flip-flop which contains a single inductance connected between
the input and output for high frequency decoupling of the tunnel diodes.

Card 1/2   UDC: 681.142.07

L 18459-66
ACC NR: AP6006383
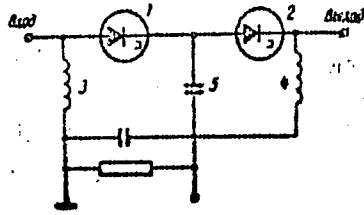
1 and 2 - tunnel diodes; 3 and 4 - tank circuit inductances;
5 - blocking capacitor.

SUB CODE: 09/   SUBM DATE: 08Feb64

Card 2/2

GOL'BERG, K., polkovnik, voyennyy letchik pervogo klassa

Prevent any prerequisite. Av. i Kosm. 47 no.152-61 '64.
(MIRA 18:1)

GOL'BERG, L. Ye.

Stretching arc with an adjustable curvature radius for the uniform
widening of cord. Kauch.i rez. 20 no.3:51 Mr '61.   (MIRA 14:3)

1. Nauchno-issledovatel'skiy konstruktorsko-tekhnologicheskiy
institut shinnoy promyshlennosti, g. Omsk.
                    (Tire fabrics)

BARANETS, A.Ya.; SHIPURNE, L.Im.

Experimental study on the life and energy activity of an inner fraction. Antibiotiki 5: .

1. Laboratoriya eksperimental'noi inaekaticy laboratory on parvy nauync...

GOL'DBERG, I.Ye.

Pharmacological studies on kanamycin.   Antibiotiki 9 no.5:
414-420 My '64.   (MIRA 18:2)

1. Laboratoriya eksperimental'nogo izucheniya lechebnykh svoistv
novykh antibiotikov (zav.- prof. G.A. Shorin) Instituta po
izyskaniyu novykh antibiotikov AMN SSSR, Moskva.

GOL'BERG, M.A. [Hol'berh, M.A.]

Direct radiation on walls and slopes in White Russia. Vestsi
AN BSSR. Ser. Fiz.-tekh. nav. no. 4:133-140 '60. (MIRA 14:1)
(Solar radiation)

GRISHCHENKO, Z.I.; GOL'BERG, M.A.

Observations on the conditions for distinguishing distant objects. Trudy GGO no.125:82-87 '62. (MIRA 15:4)

(Meteorological optics)

L 52750-65   EWT(1)/EWG(v)/FCC/EEC(t)   Pe-5/Pi-4   GW/GS

ACCESSION NR: AT5011174   UR/0000/64/000/000/0206/0209

AUTHOR: Gol'berg, M. A.

TITLE: Measurement of visibility range at night from backscattering

SOURCE: Mezhvedomstvennoye soveshchaniye po aktinometrii i optike atmosfery. 5th
Moscow, 1963. Aktinometriya i optika atmosfery (Actinometry and atmospheric
optics); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 206-209

TOPIC TAGS: atmospheric optics, atmospheric backscattering, visibility range,
atmospheric transparency, nephelometry, scattering coefficient

ABSTRACT: Field tests have now been made of the NUOR, a nephelometric apparatus
based on the backscattering principle, for determining the visibility range at
night by the recording of scattering at an angle close to 180°. The theory of
the apparatus has been described by the author elsewhere (Trudy VIIGPI, 1963,
No. 13). This paper describes the construction of calibration curves for the ap-
paratus. This was done by using data from the literature and parallel measure-
ments with the commonly used M-37 transparency recorder. Simultaneous measure-
ments were made in 1962 at the photometric polygon at Kirpol'ye and at the Mins-
kaya gidrometeorologicheskaya observatoriya (Minsk Hydrometeorological Observato-

Card   1/4

L 52750-65

ACCESSION NR: AT5011174

ry). It was found that for the entire range of visibility measured in the network
of hydrometeorological stations, the NUOR apparatus ensures an adequate degree of
accuracy. In all 898 comparative measurements there was not a single deviation
between the two instruments greater than 90%, in 84% of the cases the deviations
were less than 30% and in only four cases did the deviations exceed 60%. The
nephelometric backscattering apparatus can be used for determining the scattering
coefficient at angles close to 180°; the scattering index should be determined
independently by some other method. Data are given on the values of the relative
coefficient of scattering for angles of 175-180°, averaged for the entire period
of observation. The comparability of the NUOR and M-37 transparency recorder is
shown clearly in Fig. 1 of the Enclosure. Orig. art. has 3 formulas, 2 figures
and 1 table.

ASSOCIATION: Minskaya gidrometeorologicheskaya observatoriya (Minsk Hydrometeoro-
logical Observatory)

SUBMITTED: 25Nov64   ENCL: 02   SUB CODE: ES, OP

NO REF SOV: 007   OTHER: 001
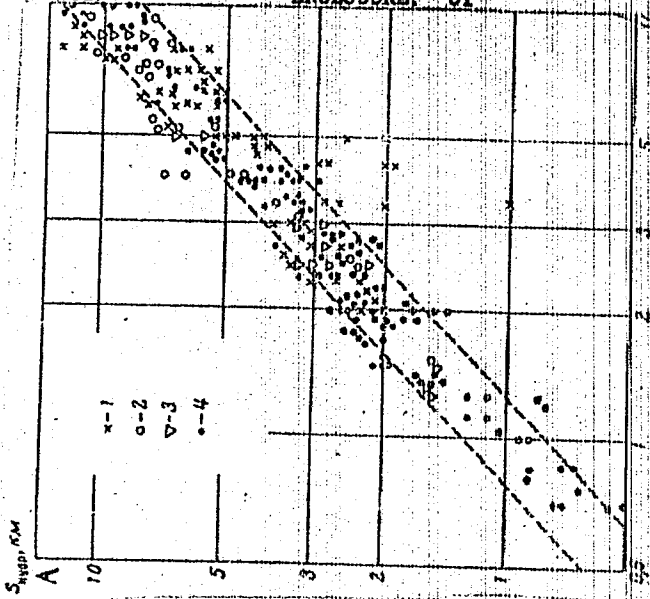
Card   2/4

L 52750-65

Card   3/4

L 52750-65

ACCESSION NR: AT5011174   ENCLOSURE: 02

Figure 1. Comparison of the results of observations with the NUOR and an H-37
transparency recorder: 1) observations during snow; 2) during rain; 3) at
twilight; 4) ordinary observations. A) S_{NUOR}, km B) S_{M-37}, km.

Card 4/4

L 60438-65   EWG(v)/EWT(1)/FCC   Pe-5/P1-4   GW

ACCESSION NR: AT5014141   UR/2778/65/000/013/0003/0017

AUTHOR: Dashkevich, L. L.; Gol'berg, M. A.; Mikhaylova, A. M.

TITLE: The N-71 back-scattering nephelometric device for the measurement of nocturnal meteorological visibility

SOURCE: Leningrad. Nauchno-issledovatel'skiy institut gidrometeorologicheskogo priborostroyeniya. Trudy, no. 13, 1965, 3-17

TOPIC TAGS: visibility determination, nocturnal visibility, nephelometric instrument, back scattering nephelometer

ABSTRACT: After the Glavnoye upravleniye gidrometeorologicheskoy sluzhby (Main Hydrometeorologic Service) decided to utilize the M-53 polarization visibility measuring device (L. L. Dashkevich, Trudy NII GMP, no. 10, 1961) as the basic tool for visibility determinations, the need arose for the design and construction of an auxiliary device which would enable the M-53 to be used for visibility determinations at night when ordinary objects are not visible. After trying out a nephelometric device (M. A. Gol'berg, Trudy NII GMP, no. 10, 1961) with light scattering at a 135° angle, and another device using the direct determination of light transmission, the authors found a third nephelometric

Card   1/2

L-60438-65

ACCESSION NR: AT5014141

device (the M-71) which uses back scattering at 180° to be the most convenient.
The article describes the operation and experimental tests of this simple
device, which is capable of determining nocturnal visibility from 50 m to 50 km.
Orig. art. has: 4 formulas, 7 figures, and 6 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut gidrometeorologicheskogo
priborostroyeniya, Leningrad (Scientific Research Institute for Hydrometeorolo-
gical Instrument Design)

SUBMITTED: 00   ENCL: 00   SUB CODE: ES

NO REF SOV: 006   OTHER: 000

Card 2/2

L 60433-65   EWG(v)/EWT(1)/FCC   Pi-4/Pe-5   GW
ACCESSION NR: AT5014142   UR/2778/65/000/013/0018/0031

AUTHOR: Gol'berg, M. A.

TITLE: Theory of back-scattering nephelometric devices

SOURCE: Leningrad. Nauchno-issledovatel'skiy institut gidrometeorologicheskogo priborostroyeniya. Trudy, no. 13, 1965, 18-31

TOPIC TAGS: visibility determination, nephelometric instrument, back scattering nephelometer

ABSTRACT: The determination of the meteorological visibility by various nephelometric devices with a constant angle of view is based on the assumption that within the entire measured range of visibilities there is a strong correlation between the scattering index and the coefficient of scattering in a given direction. Since the problem of the actual connection between the two quantities has not yet been solved, the author proceeded to develop the necessary theory dealing with particular back-scattering nephelometric devices (L. L. Dashkevich, M. A. Gol'berg, A. M. Mikhaylova, Trudy NII GIP, no. 13, 1965, pp 3-17). He derives: 1) a practical formula for the determination of the meteorological visibility from the photometer reading for the case of the M-59 polarization

Card   1/2

L 60101-65

ACCESSION NR: AP5014925

db in the medium-wave band and 3 db maximum in the short-wave band. Orig. art.
has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: EC

NO REF SOV: 000   OTHER: 000

Card 2/2

L 60434-65   EWG(v)/EWT(1)/FCC   P1-4/Pe-5   GW

ACCESSION NR: AT5014143   UR/2778/65/000/013/0032/0036

AUTHOR: Gol'berg, M. A.

TITLE: Basic results of yield tests of the M-71 back-scattering nephelometric device

SOURCE: Leningrad. Nauchno-issledovatel'skiy institut gidrometeorologicheskogo priborostroyeniya. Trudy, no. 13, 1965, 32-36

TOPIC TAGS: visibility determination, nocturnal visibility, nephelometric instrument, back scattering nephelometer

ABSTRACT: Yield tests of the M-71 back-scattering nephelometric device (L. L. Dashkevich, M. A. Gol'berg, A. M. Mikhaylova, Trudy NII GIP, no. 13, 1965, 3-17) were carried out from November 1962 to February 1963 at Voyeykovo, Aleksandrova, Kiropol'ye, Karadaga, and Minsk. Of the 5474 observations, 530 were carried out at night, 740 in the presence of snow, and 440 during rain. The accuracy was tested by comparing data from the new device with those from the M-37 transparency meter. The present paper reports statistically processed data and shows that the mean square error of visibility determinations is (in the middle range) about

Card 1/2

L 60434-65

ACCESSION NR: AT5014143

20%, while during haze, fog, and high transparency the error is 25-30%. The
instrument can be used whenever the sun is at least 8° beyond the horizon.
Orig. art. has: 2 figures and 3 tables.

ASSOCIATION: Minskaya GMO (Minsk GMO)

SUBMITTED: 00   ENCL: 00   SUB CODE: ES

NO REF SOV: 003   OTHER: 000

Card 2/2

ACC NR: AT7001809   SOURCE CODE: UR/2778/66/000/015/0032/0039

AUTHOR: Gol'berg, M. A.

ORG: none

TITLE: Errors in measuring visual range along an incline by the method of equal angles

SOURCE: Leningrad. Nauchno-issledovatel'skiy institut gidrometeorologicheskogo priborostroyeniya. Trudy, no. 15, 1966, 32-39

TOPIC TAGS: error measurement, error, approximation error, visibility measurement, visibility range measurement, equal angle method, incline visibility

ABSTRACT: The author examines an approximation theory for the measurement of the range of visibility along an incline by the method of equal angles. The method involves sighting an illuminated patch of air with two receivers, with the angles between the optical axes of the receivers and the beam of light being equal. The errors inherent in the method, and their magnitude as a function of the parameters of the equipment are analyzed, and recommendations are made on the

Card 1/2

ACC NR: AT7001809

selection of optimum parameters, particularly the angle of scattering. Orig. art.
has: 2 figures and 3 tables. [Translation of author's abstract]   [SP]

SUB CODE: 08/SUBM DATE: none/ORIG REF: 003/OTH REF: 001/

Card 2/2

GREBTSOV, P.P., red.; GOL'BERG, M.L., red.; ZUBRILINA, Z.P., tekhn.red.

[Collective farms as owners of agricultural machinery]
Kolkhozy - khoziaeva tekhniki. Moskva, Gos.izd-vo sel'khoz.
lit-ry, 1958.   109 p.   (MIRA 12:7)
                    (Farm mechanization)

USSR Electricity - DC Generators   Jan 52
                        Electrolysis

"New Method for Measuring Total Current of DC Gener-
ators Operating in Parallel," Engr M. S. Gol'berg

"From Energet" No 1, pp 16-17

Discusses method proposed by Engrs N. V. Kozytov
and I. B. Karpisky of Yuzhelektromontazh for
measuring total current of dc generators in paral-
lel operation supplying electrolytic baths. Method
permits use of over-all shunt of the order of 15 a
instead of usual high-capacity type (i.e., type

24273

"TEE produced by plants of Min of Elec Industry,
rated at 6,000 a), conserves nonferrous metals,
and provides simpler installation.

24273

GOL'BERG, M.S., inzhener.

Aluminum-core cable and wire connections and terminals. Elek.
sta. 25 no.10:50 0 '54.
        (Electric conductors)

(MIRA 7:11)

AID P - 3402

Subject   : USSR/Electricity

Card 1/1   Pub. 29 - 17/30

Author   : Gol'berg, M. S., Eng.

Title   : Assembling large electric machinery outside the
                 assembly area

Periodical   : Energetik, 10, 23-25, O 1955

Abstract   : The author describes a case of assembling fifteen
                 electric machines with a total weight of 240 t
                 delivered in a dismantled state. He presents the
                 method of assembling and three photographs.

Institution   : None

Submitted   : No date

AID P - 3325

Subject	:	USSR/Power Engineering
Card 1/1		Pub. 26 - 11/28
Author	:	Gol'berg, M. S., Eng.
Title	:	Connecting aluminum electrical equipment to buses
Periodical	:	Elek. sta., 8, 36-37, Ag 1955
Abstract	:	The article points out that the electrical equipment now in use at power plants was designed to operate with copper buses. The use of aluminum buses brings forward the necessity of revising and readjusting the process of their installation. The author recommends the use of welded copper-aluminum or copper plates with bolts.
Institution	:	None
Submitted	:	No date

NIKOLAYEV, N.N.; GOL'BERG, N.V.

Continuous production of cotton hosiery. Leg.prom.15 [i.e.16]
no.3:16-19 Mr '56.   (MLRA 9:7)
                    (Hosiery industry)

GOL'BERG, P., inzh.

Structures for storing corn cobs. Sel'.stroi. 15
no.7:10-11 Jl '60.   (MIRA 13:8)
      (Berezovka District—Corn(Maize)—Storage)

GOL'BERG, P., inzhener.

Roofing tiles made of rubbered waste products. Sel'.strci. 10 no.1:
17-19 Ja '55.   (MLRA 8:4)
     (Roofing)

GOL'BERG, P., inzhener.

Sectional corn cribs of blocks of shell rock. Mik.-elev.prom. 21
no.12:12-13 D '55.   (MLRA 9:4)
            (Granaries) (Limestone)

GOL'BERG, P., inzh.

Corn crib built of solid and hollow bricks with a capacity of 250-
750 tons. Sel'. stroi. 12 no.10:15-17 O '57.   (MLRA 10:11)
                (Corn (Maize)--Storage)   (Farm buildings)

GOL'BERG, P., inzh.

Large trenches for ensiling corn. Sel'. stroi. 13 no. 7:8-9
Jl '58.   (MIRA 11:8)

(Silos)

GOL'BERG, P., inzh.

Potentialities for lowering construction costs of silo struc-
tures. Sel'.stroi. 14 no.8:23 Ag '59.   (MIRA 12:12)
                    (Silos)

GOL'BERG, P., kand.tekhn.nauk; RENDINO, S., arkhitektor

Panel and frame-panel reed construction. Sil'.bud. 11 no.6:12-14
Je '61.

(Reed products) (Building)   (MIRA 14:7)

GOL'BERG, P., inzh.

Road building on livestock farms. Sel'. stroi. 15 no. 3:25
Mr '61.   (MIRA 14:5)
                        (Road construction)

AYZENBERG, M.; GOL'BERG, I.

      Personnel for large-panel building. Prof.-tekh. obr. 20
no.12:26-27 D '63.
(MIRA 17:1)

      1. Zamestitel' nachal'nika Otdela tekhnicheskiy informatsii
Org'-khstroya Glavch-rmonstroya, g. Odessa (for Ayzenberg).

GOL'BERG, P.A.

Beskonechnyye poluprostyye gruppy. Matem. SB., 17(59), (1945), 131-142.
Silovskiye P-podgruppy lokal'no normal'nykh grupp. Matem. SB., 19(61), (1946),
451-460.

SO: Mathematics in the USSR, 1917-1947
        edited by Kuresh, A.G.
        Markushevich, A.I.
        Rashevskiy, R.K.
     Moscow-Leningrad, 1948

Golberg, P.

Golberg, P. The Shov II-groups or locally normal groups.
Rec. Math. [Mat. Sbornik] N.S. 19(61), 457-??, (19??).
(Russian. English summary)

The author defines locally normal groups (every finite subset generates a finite invariant subgroup), locally finite groups (every finite subset generates a finite subgroup) and local inner automorphisms (operating innerly on every finite subset), in order to generalize the theorems of P. Hall relating to characteristic properties of finite soluble groups and Sylow systems [?]. London M. L. So. 3, 98-105 (1928); 12, 198-200 (19??); Proc. London Math. Soc. (2) 43, 316-323 (1937).

Source: Mathematical Reviews,   Vol.   No.

Gol'berg, P. A. Sylow bases of π-separable groups. Doklady Akad. N'uk SSSR (N.S.) 64, 615-618 (1949). (Russian)

Let σ_i be a collection of k primes. If every index in a composition series of a finite group G is divisible by at most one prime of σ_i, then G is called π-separable (σ_i), or π-separable. If σ_i contains all the prime factors of the order of the group, then the group is soluble. Let Σ be a set of Sylow subgroups of G; suppose that, for each subset T of Sylow subgroups from Σ, the order of the group generated by T is divisible by no primes other than those which correspond to the Sylow groups in T. Then Σ is called a Sylow basis in G. Theorem 1. Let a finite group G be π-separable (σ_i). Then G has a Sylow basis which contains one Sylow subgroup corresponding to each prime in σ_i.

Proof: If $k=1$, this is Sylow's theorem. If $k>1$, there is a normal subgroup H of G [$G\supset H$]; suppose $P_1(\sigma_i)$ provides the index of H. By induction hypothesis, H has a Sylow basis $\{S_1, S_2, \ldots, S_l\}$ where $S_1, \ldots, S_l$ are Sylow subgroups of G belonging to σ_i. Let $S(G)\subset G(H)$ be the set of those elements in G [H] which transform the Sylow bases into itself. The indices of $S(G)$ [$S(H)$] in G [H] are equal; from this it follows that $[G/P_1, \ldots] = 1$, $[G]$ is a Sylow basis in G, where P_1 is the Sylow subgroup of $S(G)$ corresponding to the prime P_1. Theorem 2. In G, some Sylow bases corresponding to the same set of primes are mutually conjugate. These theorems generalize results of P. Hall [Proc. London Math. Soc. (2) 43, 223 (1937)] and S. A. Čunihin [Doklady Akad. Nauk SSSR (N.S.) 59, 443-445 (1948)].

J. L. Brenner.
Math. Rev. 9, 1921

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Gol'berg, P. A. Sylow bases of infinite groups. Mat.
Sbornik N.S. 32(74), 465–476 (1953). (Russian)

If G is a group, the set $S: S_1, S_2, \cdots$ of Sylow subgroups
forms a Sylow basis if no element of $\{S_i\}$, $i \in T$, is divisible
by any primes not corresponding to the subgroup involved,
whenever T is a subset of the integers, and if $\{S\}$ is G.
Theorem. Let S be a Sylow basis, let $N(S)$ denote the inter-
section of the normalisers of S and all bases conjugate to S
in G. If the factor group $G/N(S)$ is locally finite and satisfies
the descending chain condition for subgroups (d.c.c.), any
two Sylow bases of G are mutually conjugate. This gen-
eralizes a result of Baer [Duke Math. J. 6, 598–614 (1940);
these Rev. 2, 2] where the groups are finite. The paper
shows that the theory of Sylow bases and Sylow π-bases
(condition restricted to Sylow subgroups corresponding to a
set π of primes) can be extended from finite groups to
locally finite groups with d.c.c. [The reviewer can supply a
translation of this paper.]   J. L. Brenner.

USSR/Mathematics - Group Theory

"Existence and ... of ... in ...," ... ...

October, Vol ..., (...), No 1, pp 141-...

Reviews the ... in the ...-type theorems. Demonstrates the theorem in the sufficient and necessary criteria for the ... of ... and ... in the maximum subgroups of ... . Also relate work of the ... "Theory of Groups of finite order," Dude mathem. 3 (1954). Cite the Soviet ... of L. A. Kel'berg (1945), J. L. Kel'man (1940), and A. V. ... (1941). Presented in ... .

GOL'BERG,P.A. (Moscow)

One attribute of conjugation for a group of Sylow's P-bases of an
arbitrary group. Mat.sbor. 36 no.2:335-340 Mr-Ap '55.   (MLRA 8:6)
(Groups, Theory of)

16(1)

AUTHOR: Gol'berg, P.A.

TITLE: VF - Subgroups of Infinite Groups

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika,1959,
             Nr 4, pp 50 - 55 (USSR)

ABSTRACT: A group with the property v is called v-group. A group is
             called V-group, if it contains an increasing normal sequence
             $E = A_0 \subset A_1 \subset A_2 \subset .. \subset A_\alpha \subset .. \subset A_\mu = G$ with the property that
             in the system of property V there exists to every $\alpha < \mu$
             a property $v^{(\alpha)}$ so that $A_{\alpha + 1} / A_\alpha$ is a $v^{(\alpha)}$ - group. A
             V-group G is called VF-group, if V contains at least one
             property which holds for all finite groups. The maximum
             V-normal divisor H_μ of G is called V-radical of G.
             Theorem: Every VF-subgroup A of an arbitrary group G which
             possesses finitely many conjugate subgroups in G is contained
             in the VF-radical of G.
             Theorem : A subgroup B of an arbitrary group G is assumed to
             be generated by an arbitrary set $\sum$ of VF-subgroups of G ,

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whereby each generating subgroup is assumed to possess
finitely many conjugate subgroups in G. Then B is a VF-group.

Theorem : Let an arbitrary set $\sum$ of VF-subgroups be given
in G ; each of these subgroups is assumed to possess finite-
ly many conjugate subgroups in G ; let A be an arbitrary
VF-group. A subgroup generated by A and $\sum$ is a VF-group.
Altogehter there are given 8 theorems.
There are 5 references, 4 of which are Soviet, and 1 German.

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